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MAR 19 2008

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A computer-implemented method of operating a navigation system ~~forming an index for a geographic database containing data that represent geographic features~~, said method comprising:

using a geographic database containing data that represents geographic features, wherein said database includes an ~~creating a single~~ indexing structure with ~~that includes~~ three dimensions, ~~forming~~ wherein a first dimension of said three dimensions ~~to include~~ includes latitude boundary information, ~~forming~~ wherein a second dimension of said three dimensions ~~to include~~ includes longitude boundary information, wherein said latitude boundary information and said longitude boundary information define a bounded area represented by a maximum latitude, a maximum longitude, a minimum latitude and a minimum longitude, ~~said data that represent geographic features indexed by said structure are searchable spatially using a latitude, a longitude and said first and second dimensions of said indexing structure, forming~~ wherein a third dimension of said three dimensions ~~to include~~ includes rank information, wherein each of said geographic features have an associated rank information, wherein said rank information has at least two levels, a first level of rank is associated with the most important geographic features and a second level of rank is associated with geographic features of lesser importance, ~~said data that represent geographic features indexed by said structure are searchable for said rank of the geographic features using said third dimension of said indexing structure, storing said index on a computer readable medium~~

searching said geographic database for data representing a geographic feature using a latitude value, a longitude value and a rank value, wherein said search uses said first and second dimensions of said indexing structure to identify the bounded area in which the latitude value and longitude value falls within, wherein said search uses said third dimension of said indexing structure to identify said level of rank corresponding to said rank value.

Claim 2 (currently amended): A computer-implemented index stored on a computer readable medium for a geographic database containing geographic data that represent geographic features, said index comprising:

a single index structure that includes two spatial dimensions and a non-spatial third dimension, wherein said two spatial dimensions define a bounded area represented by a maximum latitude, a maximum longitude, a minimum latitude and a minimum longitude,

wherein said structure is a *k*-d-tree index structure comprising a root node, intermediate nodes and leaf nodes,

said geographic data indexed by said structure are searchable spatially using computer-executable instructions and said two spatial dimensions of said index structure and a latitude and a longitude,

said geographic data indexed by said structure are searchable for a non-spatial property of the indexed geographic data that represent the geographic features using computer-executable instructions and said third dimension of said index structure, wherein said non-spatial property of the geographic data includes at least one of: a rank associated with the geographic features represented by the geographic data, a granularity of said indexed geographic data, and a scale associated with said indexed geographic data.

Claim 3 (previously presented): The method of Claim 1 wherein said structure is a *k*-d-tree index structure comprising a root node, intermediate nodes and leaf nodes, wherein each node is part of a parent-child relationship wherein each parent node includes control information from which one of at least two child nodes associated with the parent node are distinguishable based on a search key.

Claim 4 (previously presented): The invention of Claim 1 or 2 wherein said index is homogeneous.

Claim 5 (previously presented): The invention of Claim 1 or 2 wherein said index is non-homogeneous.

Claim 6 (original): The invention of Claim 1 or 2 wherein said geographic features are roads.

Claim 7 (canceled).

Claim 8 (previously presented): The invention of Claim 1 or 2 wherein said rank includes both integers and fractional values.

Claim 9 (previously presented): The invention of Claim 14 wherein said selectivity is a granularity of the indexed data.

Claim 10 (previously presented): The invention of Claim 14 wherein said selectivity is a viewing altitude associated with the indexed data.

Claim 11 (previously presented): The invention of Claim 14 wherein said selectivity is a scale associated with the indexed data.

Claim 12 (previously presented): The invention of Claim 14 wherein said selectivity is an expiration date associated with the indexed data.

Claim 13 (previously presented): The invention of Claim 14 wherein said selectivity is a creation date associated with the indexed data.

Claim 14 (currently amended): A computer-implemented index stored on a computer readable medium comprising:

a single indexing structure that includes a first dimension, a second dimension and a third dimension,

wherein said first dimension includes latitude boundary information,

wherein said second dimension includes longitude boundary information, wherein said latitude boundary information and said longitude boundary information define a bounded area represented by a maximum latitude, a maximum longitude, a minimum latitude and a minimum longitude, said data indexed by said structure are searchable using computer-executable instructions and a latitude, a longitude and said first and second dimension of said indexing structure,

wherein said third dimension includes a selectivity of said indexed data, said data indexed by said indexing structure is searchable for said selectivity using computer-executable instructions and said third dimension of said indexing structure.

Claim 15 (previously presented): The method of Claim 1 wherein said data that represent geographic features are organized into layers based on said rank associated with the represented features.